

Listing and Amendments to the Claims

This listing of claims will replace all previous versions and listings of claims in this application:

1. **(Currently Amended)** A method of embedding auxiliary data in a host signal, the method comprising ~~the steps of:~~

using a predetermined data embedding method having a given embedding rate and distortion to produce a composite signal;

using a portion of said embedding rate to accommodate restoration data identifying the host signal conditioned on said composite signal; ~~and~~

using the remaining embedding rate for embedding said auxiliary data;

dividing the host signal into successive segments;

applying the predetermined data embedding method to said segments; and

accommodating in a segment the restoration data for a previous segment.

2. **(Cancelled)**

3. **(Currently Amended)** A method as claimed in claim [[2]] 1, wherein each segment comprises the restoration data for said previous segment as well as auxiliary data.

4. **(Currently Amended)** A method as claimed in claim [[2]] 1, ~~comprising the steps of:~~

(a) accommodating auxiliary data only in a segment of a given length;

(b) accommodating, in a subsequent segment, restoration data only for the previous segment

(c) adapting the length of said subsequent segment to the amount of restoration data being embedded therein;

(d) repeating steps (b) and (c) a predetermined number of times.

5. **(Currently Amended)** A method as claimed in claim 4, wherein ~~said step (d)~~ comprises repeating steps (b) and (c) until the length of the subsequent segment is smaller than a predetermined threshold.

6. **(Currently Amended)** An arrangement for embedding auxiliary data in a host signal, the arrangement comprising:

a predetermined data embedder having a given embedding rate and distortion to produce a composite signal with embedded data;

means for generating restoration data identifying the host signal conditioned on the composite signal; and

means for accommodating said restoration data in a portion of said embedded data and said auxiliary data in the remaining portion of said embedded data;

means for dividing the host signal into successive segments;

means for applying the predetermined data embedding method to said segments; and

means for accommodating in a segment the restoration data for a previous segment.

7. **(Currently Amended)** A method of reconstructing a host signal from a composite signal representing a distorted version of said host signal with data embedded therein, the method comprising ~~the steps of:~~

retrieving the embedded data from the composite signal;

splitting the embedded data into restoration data and auxiliary data, the restoration data identifying distorted symbols in the distorted version of the host signal; and

reconstructing the host signal using the ~~reconstruction~~ restoration data, given the composite signal;

dividing the composite signal into successive segments; and

using the restoration data accommodated in a segment for reconstructing a previous segment of the host signal.

8. **(Cancelled)**

9. **(Currently Amended)** A method as claimed in claim [[8]] 7, wherein each segment of the composite signal comprises the restoration data for said previous segment of the host signal as well as auxiliary data.

10. **(Currently Amended)** An arrangement for reconstructing a host signal from a composite signal representing a distorted version of said host signal with data embedded therein, the arrangement comprising:

means for retrieving the embedded data from the composite signal;

splitting means for splitting the embedded data into restoration data and auxiliary data,
the restoration data identifying distorted symbols in the distorted version of the host signal;

reconstruction means for reconstructing the host signal using the ~~reconstruction~~
restoration data, given the composite signal;

means for dividing the composite signal into successive segments; and

means for using the restoration data accommodated in a segment for reconstructing a
previous segment of the host signal.

11. **(Cancelled)**

12. **(Withdrawn)** A method comprising:

receiving content data, and

embedding auxiliary data and reconstruction data into segments of the content data by
modifying symbols of the segments,

wherein

the reconstruction data includes an identification of modified symbols of the segments, to
facilitate a reconstruction of the symbols of the segments to their original form in the content
data.

13. **(Withdrawn)** The method of claim 12, wherein the modifying of each symbol includes
applying a select distortion of a plurality of distortions, and the reconstruction data includes an
identification of the select distortion applied to each symbol.

14. **(Withdrawn)** The method of claim 13, wherein the segments occur sequentially, and the
reconstruction data in a first segment includes the identification of the modified symbols of a
prior segment.

15. **(Withdrawn)** The method of claim 14, including adapting a length of the first segment based on a length of the restoration data of the prior segment in the first segment.

16. **(Withdrawn)** The method of claim 14, including selectively avoiding the embedding of the auxiliary data in the first segment based on a length of the restoration data.

17. **(Withdrawn)** A method comprising:

- receiving modified content data that includes modified segments of original content data,
- processing the modified segments to obtain auxiliary data and reconstruction data that identifies modified symbols in the modified segments, and
- reconstructing the original content data based on the reconstruction data.

18. **(Withdrawn)** The method of claim 17, wherein the modified segments occur sequentially and the reconstruction data in a first modified segment identifies the modified symbols in a prior modified segment.

19. **(Withdrawn)** The method of claim 17, wherein each modified symbol corresponds to a select distortion of a plurality of distortions of a symbol in the original content data, and the reconstruction data includes an identification of the select distortion for each modified symbol.

20. **(Withdrawn)** A computer readable media that is suitable for processing by a processor to effect a rendering of content material, including:

- unmodified segments of the content material, and
- modified segments of the content material that includes embedded auxiliary data and reconstruction data,

wherein the reconstruction data includes an identification of modified symbols of the modified segments that allow the processor to:

- reconstruct second unmodified segments of the content material,
- create a combination of the first and second unmodified segments, and
- render the combination to effect a distortion-free rendering of the content material.